

46. A double-sided printed wiring board comprising:

an insulator substrate having a blind via extending at least partly therethrough;

a cured mass of a flowable conductive material filling said blind via and having an end located adjacent to at least one side of said insulator substrate; and

a conductive pad disposed over the cured mass of flowable conductive material and being in electrical communication with the cured mass of flowable conductive material.

47. The board according to claim 46, wherein said cured mass of flowable conductive material is selected from the group consisting of conductive inks, conductive pastes, and conductive adhesives.

48. The board according to claim 46, wherein said conductive pad comprises copper.

49. The board according to claim 48, wherein said conductive pad has a thickness greater than approximately 0.2 mils.

50. A printed circuit board (PCB) having one or more strata and comprising:

a via extending through at least one of said strata, said via having a sidewall;

a first conductive material disposed on at least one side of said one of said strata such that said via has an opening, said first conductive material comprising electrolytically deposited copper having a substantially uniform thickness exceeding approximately 0.2 mils;

a second conductive material disposed in said opening to substantially fill said opening; and

a third conductive material disposed on said first conductive material on said at least one side of said one of said strata and on an end of said second conductive material in said opening.

51. The board according to claim 50, wherein said second conductive material is cured flowable conductive material.

52. The board according to claim 51, wherein said second conductive material is a conductive ink.

53. A circuit board comprising:

a substrate having at least first and second generally parallel surfaces and a blind via extending from the first surface, the blind via having a sidewall;

a first conductive layer extending over substantially all of the first surface;

a conductive material positioned within the blind via, the conductive material plugging the blind via such that the blind via has no opening extending from the first surface; and

a second conductive layer extending over substantially all of the first conductive layer on the first surface, and over an end portion of the conductive material positioned within the blind via.

54. The circuit board of claim 53 wherein the first and second surfaces are exterior surfaces of the substrate.

55. The circuit board of claim 53 wherein the first conductive layer comprises copper.

56. The circuit board of claim 55 wherein the second conductive layer comprises copper.

57. The circuit board of claim 53 wherein the conductive material positioned within the via is selected from the group consisting of conductive inks, conductive pastes, and conductive adhesives.

58. The circuit board of claim 57 wherein the conductive material is a conductive ink.

59. The circuit board of claim 58 wherein the conductive ink comprises at least one of silver, copper, and a noble metal.

60. The circuit board of claim 53 wherein the first and second conductive layers are adapted to be etched to thereby form a conductive pad positioned on the conductive material plugging the via.

Respectfully submitted,



Marc A. Brockhaus, Reg. No. 40,923
Customer No. 30589
DUNLAP, CODDING & ROGERS, P.C.
P.O. Box 16370
Oklahoma City, Oklahoma 73113
(405) 607-8600 - telephone
(405) 607-8686 - telefax

Attorney for Applicant